WHAT IS CLAIMED IS:

1. A method of using a machining assembly to machine a plurality of different turbine components that include a dovetail having a contoured profile, said method comprising:

removably coupling a first set of retainers into the machining assembly, the first set of retainers include an upper portion having a profile that substantially mirrors a portion of the first dovetail, and a lower portion having a profile that substantially mirrors an opposite side of the first dovetail;

coupling a first turbine component between the upper and lower portions such that the first turbine component is secured by the first set of retainers;

coupling the machining assembly into a milling machine; and

machining at least one seal groove into the dovetail of the first turbine component.

2. A method in accordance with Claim 1 further comprising:

uncoupling only the first set of retainers and the first turbine component from the machining assembly;

coupling a second set of retainers into the machining assembly, wherein the second set of retainers include an upper portion having a profile that substantially mirrors a portion of a second dovetail extending from a second turbine component that is different than the first turbine component, and a lower portion having a profile that substantially mirrors an opposite side of the second dovetail;

coupling the second turbine component between the upper portion and the lower portion such that the second turbine component is secured by the first set of retainers;

coupling the machining assembly into a milling machine; and

machining at least one seal groove into the dovetail of the second turbine component.

3. A method in accordance with Claim 1 wherein coupling a first set of retainers into the machining assembly comprises:

retaining the lower portion within the machining assembly using a first locking mechanism; and

retaining the upper portion within the machining assembly using a second locking mechanism different than the first locking mechanism.

4. A method in accordance with Claim 1 wherein machining at least one seal groove into the dovetail comprises machining at least one seal groove into the dovetail using a cubic boron nitride (CBN) grinding wheel.

5. A method in accordance with Claim 1 wherein machining at least one seal groove into the dovetail comprises machining two seal grooves into the dovetail using a cubic boron nitride (CBN) grinding wheel.

6. An assembly for machining a seal wire groove into a gas turbine rotor blade that includes a dovetail, said assembly comprising:

a base portion;

a body portion coupled to said base portion; and

a first set of retainers removably coupled to said body portion, said first set of retainers comprising an upper portion having a profile that substantially mirrors a portion of the first dovetail, and a lower portion having a profile that substantially mirrors an opposite side of the first dovetail.

7. An assembly in accordance with Claim 6 further comprising a locking mechanism configured to secure said lower portion within said body portion.

8. An assembly in accordance with Claim 6 wherein said upper portion comprises a locking mechanism configured to secure said upper portion within said body portion.

9. An assembly in accordance with Claim 6 wherein said body portion comprises:

a first opening sized to receive said upper portion therein; and

a second opening sized to receive said lower portion therein.

10. An assembly in accordance with Claim 9 wherein said upper portion and said first opening each have a substantially rectangular cross-sectional profile.

11. An assembly in accordance with Claim 9 wherein said lower portion and said second opening each have a substantially T-shaped cross-sectional profile.

12. An assembly in accordance with Claim 6 further comprising a second set of retainers that is different than said first set of retainers, said second set of retainers comprising an upper portion having a profile that substantially mirrors a portion of a second dovetail extending from a second turbine component that is different than the first turbine component, and a lower portion having a profile that substantially mirrors an opposite side of said second dovetail.

13. A milling machine comprising:

an assembly for machining a seal wire groove into a gas turbine rotor blade that includes a dovetail, said assembly comprising:

a base portion;

a body portion coupled to said base portion; and

a first set of retainers removably coupled to said body portion, said first set of retainers comprising an upper portion having a profile that substantially mirrors a portion of the first dovetail, and a lower portion having a profile that substantially mirrors an opposite side of the first dovetail; and

a grinding wheel configured to machine at least one seal wire groove into said dovetail.

14. A milling machine in accordance with Claim 13 wherein said assembly further comprises:

a first locking mechanism configured to secure said lower portion within said body portion; and

a second locking mechanism coupled to said upper portion and configured to secure said upper portion within said body portion.

15. A milling machine in accordance with Claim 13 wherein said body portion comprises:

a first opening sized to receive said upper portion therein; and

a second opening sized to receive said lower portion therein.

16. A milling machine in accordance with Claim 15 wherein said upper portion and said first opening each have a substantially rectangular cross-sectional profile.

17. A milling machine in accordance with Claim 15 wherein said lower portion and said second opening each have a substantially T-shaped cross-sectional profile.

18. A milling machine in accordance with Claim 13 wherein said assembly further comprises a second set of retainers that is different than said first set of retainers, said second set of retainers comprising an upper portion having a profile that substantially mirrors a portion of a second dovetail extending from a second turbine component that is different than the first turbine component, and a lower portion having a profile that substantially mirrors an opposite side of said second dovetail.

19. A milling machine in accordance with Claim 13 wherein said grinding wheel further comprises a cubic boron nitride (CBN) grinding wheel configured to machine two seal wire grooves into said dovetail.

20. A milling machine in accordance with Claim 19 wherein said CBN grinding wheel comprises a cutting geometry that substantially mirrors a seal wire geometry.